

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J2001** 

## **Project Title**

# Discovering Different Glucose Levels in Commercial and Homemade Smoothies

## **Objectives/Goals**

## **Abstract**

Have you ever thought of having a nice smoothie from Starbucks? Or just a Strawberry Banana Smoothie? This project will be covering the different hidden sugars in homemade and store-bought smoothies. The project illustrates the glucose content in all of the additives in your favorite smoothies. The hypothesis for this project was that store bought smoothies contain more hidden sugars than a homemade smoothie because most stores bought smoothies contain frozen fruit.

### Methods/Materials

Graduated Cylinder, Glucose Powder, Urinalysis test strips that measure glucose, Graduated transfer pipettes, Disposable cups, Permanent marker, Food coloring, Spoons for stirring, Distilled water, Measuring spoons, Timer or clock with a second hand, Scale, Blender, Lab notebook, Strawberries, Pineapple, Bananas, Soy Milk, Cocoa Powder, Concentrated Orange Juice, Heavy Whipping Cream, Milk, Honey, Starbucks Strawberry Banana Smoothie, Frozen Strawberry Banana Smoothie, Naked Strawberry Banana Smoothie, Homemade Strawberry Banana Smoothie.

#### **Results**

The additives tested in this project included things such as bananas, pineapple and strawberries. liquids such as soy milk, orange juice and more. the smoothies that were tested were a homemade smoothie, a Starbucks smoothie, a Naked juice smoothie and a frozen smoothie. Each one was then compared and some additive had more of a glucose content than others but the additive with the most was the concentrated orange juice. The smoothies with the most sugars were the Frozen smoothie and the Starbucks smoothie.

#### Conclusions/Discussion

This proves our hypothesis right because the two smoothies with the most glucose content were store bought.

### **Summary Statement**

In this project will be covering the glucose level in commercial and homemade smoothies, which will be compared to which smoothie has a higher glucose content.

## **Help Received**

Gloria and Victor Torres, Kim Shirley, Ms.Sally Burns, Mrs. Heather Vickers, Mr. Alex Hofsteen, and Flor Lopez and Jaime Antonio